

**A WIRELESS TELEPHONE SYSTEM WITH BOTH CORDLESS SHORT
RANGE COMMUNICATION AND LONG RANGE MOBILE
WIRELESS CELLULAR TELEPHONE COMMUNICATION**

Abstract

5 Cordless and wireless telephone communication functions are combined in a unitary wireless telephone system that comprises a mobile wireless telephone member combining short range radio frequency communication implementation for transmitting and receiving voice data
10 over a short range, with long range radio frequency communication implementation for transmitting and receiving voice data over a long range. The system also includes stationary communication means for receiving and transmitting voice data from and to the mobile wireless
15 member voice data over said short range and stationary communication means for respectively receiving and transmitting voice data from and to the mobile wireless member voice data over said long range.

 The system may also include an implementation for
20 determining whether said mobile wireless telephone member is outside said short range when said member is receiving or transmitting said voice data, together with an implementation for communicating with said mobile wireless telephone member through said stationary short range radio frequency whenever said member is determined
25 not to be outside of the short range and an implementation for communicating with said mobile wireless telephone member through the stationary long range radio frequency implementation whenever said member
30 is determined to be outside of said short range.